

Aluminum Research  
Possible Areas of Activity

Research - New Processes

- o Review literature for alternative processes for production of aluminum.
- o Aluminum fluoride from fluosilicic acid (Amax?)
- o Aluminum fluoride from failed potlinings (Alcan D-process?)
- o  $Al_2O_3$  by ammonoalunite process (RWB proposal)
- o Aluminum sulphide reduction.
- o Anaconda Clay process

Research - H-H Process

- o Wettable cathodes -  $TiB_2$
- o Non-consumable anodes
- o  $Al_2O_3$  properties, characterization and behaviour
- o Alternative electrolytes
- o Current distribution and magnetics mathematical models (contract research?)

Development - H-H Process

- o Lithium fluoride electrolyte
- o Petroleum pitch for anode binder
- o Methodology for selection of alternative cokes and pitches
- o Process control studies
- o Alternative cathode bottom blocks for Sumitomo-type cells - CF
- o Anode baking furnace productivity?
- o Improve electromagnetics - CF

### Technical Services

- o Technological Audit of Operations - CF & Sebree
- o Improve bath/alumina recovery and recycling - CF
- o Reduce iron in scrubber ore - CF